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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,377	04/12/2002	Mutsumi Suzuki	NITT.0057	9511

7590

02/03/2005

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EXAMINER

NGUYEN, KEVIN M

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 02/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/031,377

Applicant(s)

SUZUKI ET AL.

Examiner

Kevin M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 01/18/02, 10/09/02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Drawings

1. Figures 13-15 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 4-12, and 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Sarrasin (IDS cited, US 5,600,343).
3. As to claims 1, 11 and 16, Sarrasin teaches an image display associated with a method, the image display including
 - a. a lower wall (a first plate, fig. 1), a plurality of microtip 16 (a plurality of electron-emitter elements, fig. 1), an insulating layer 12, the control circuit 24 supplies voltage +V_c or –V_c.
 - b. column electrodes 8 (a base electrode, a plurality of first electrodes, fig. 1)

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- c. row electrodes 10 (a top electrode, a plurality of second electrodes, fig. 1),
 - d. inherent a frame component.
 - e. an upper wall 4 (a second plate, fig. 1) has a light emitting material 22 (a phosphor).
 - f. a conventional cathodoluminescent inherent includes a space and a vacuum.
 - g. A control circuit 24 (first driving means) supplies driving voltages $+V_c$ or $-V_c$.
 - h. A control circuit 26i (second driving means) supplies driving voltages V_d , VLs (col. 5, lines 7-10).
 - i. Fig. 2 shows a potential V_d applied throughout the selection time of the row L_{i+1} . Following the discharge of the row L_i , the latter is placed under high impedance (HZ) during the entire non-selection time of the row L_i (col. 5, lines 25-30).
2. As to claims 2, 12 and 17, Sarrasin teaches an image display associated with a method, the image display including
- j. a lower wall (a first plate, fig. 1), a plurality of microtip 16 (a plurality of electron-emitter elements, fig. 1), an insulating layer 12, the control circuit 24 supplies voltage $+V_c$ or $-V_c$.
 - k. column electrodes 8 (a base electrode, a plurality of first electrodes, fig. 1)
 - l. row electrodes 10 (a top electrode, a plurality of second electrodes, fig. 1),
 - m. inherent a frame component.

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- n. a upper wall 4 (a second plate, fig. 1) has a light emitting material 22 (a phosphor).
 - o. a conventional cathodoluminescent inherent includes a space and a vacuum.
 - p. A control circuit 24 (first driving means) supplies driving voltages $+V_c$ or $-V_c$.
 - q. A control circuit 26i (second driving means) supplies driving voltages V_d , VLs (col. 5, lines 7-10).
 - r. Fig. 2 shows a potential V_d applied throughout the selection time of the row L_i . Following the discharge of the row L_i , the latter is placed under high impedance (HZ) during the entire non-selection time of the row L_i (col. 5, lines 25-30).
 - s. Following the discharge of the row $L_i + 1$, the latter is placed under high impedance (HZ) during the entire non-selection time of the row $L_i + 1$ (col. 5, lines 25-30).
3. As to claims 4 and 14, Sarrasin teaches Fig. 2 shows a potential V_d applied throughout the selection time of the row L_i . Following the discharge of the row L_i , the latter is placed under high impedance (HZ) during the entire non-selection time of the row L_i (col. 5, lines 25-30). Sarrasin reviews the previously selected row passes into a high impedance state HZ and the row potential is then floating (col. 2, lines 25-26).
4. As to claims 5 and 15, Sarrasin teaches Fig. 2 shows a potential V_d applied throughout the selection time of the row $L_i + 1$. Following the discharge of the row $L_i + 1$,

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the latter is placed under high impedance (HZ) during the entire non-selection time of the row Li (col. 5, lines 25-30). Sarrasin reviews the previously selected row passes into a high impedance state HZ and the row potential is then floating (col. 2, lines 25-26).

5. As to claim 6, Sarrasin teaches row electrodes 10 defined a top electrode or a plurality of second electrodes. The row electrodes 8 function as the bus lines.

6. As to claim 7, Sarrasin teaches column electrodes 8 defined a base electrode or a plurality of first electrodes.

7. As to claims 8, 9, Sarrasin teaches column electrodes 8 (the base electrode) carry microtip 16 made from an electron emitting material at the pixels (col. 4, lines 45-46). Thus, column electrodes 8 (the base electrode) function as a metal or semiconductor.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sarrasin.

9. Sarrasin teaches all the subject matter claimed with the exception of the high impedance is an impedance of 1MΩ or more. Absent a showing of criticality it would have been within the level of skill in the art and obvious to one having ordinary skill to engineering design the range/size of a well-known element is normally not directed

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toward patentable subject matter as desired as was judicially recognized in re Rose,
105 USPQ 237 (CCPA 1955) and in re Reven, 156 USPQ 679 (CCPA 1968).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kevin M. Nguyen** whose telephone number is **703-305-6209**. The examiner can normally be reached on MON-THU from 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Patrick Edouard** can be reached on **703-308-6725**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9306 (for Technology Center 2600 only)

Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Kevin M. Nguyen
Patent Examiner
Art Unit 2674

KN
January 26, 2005


XIAO WU
PRIMARY EXAMINER